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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,153	03/13/2002	Hisahiko Fukase	29305-68561	9936
7590	10/23/2003			
Barnes & Thornburg 11 South Meridian Street Indianapolis, IN 46204			EXAMINER	
			TRAN, LEN	
		ART UNIT	PAPER NUMBER	
		1725		

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/088,153	FUKASE ET AL.	
	<b>Examiner</b> Len Tran	<b>Art Unit</b> 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 8/18/03.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-23 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)

3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_      6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,397,924 in view of JP 55-165260 and JP 5921525 .

US '924 discloses the method of casting metal strip comprising the steps of holding a pair of chilled casting rolls, biasing one roll laterally towards the other roll, pouring molten metal in the nip, by setting a minimum nip width. A stop mean is introduced to limit bodily movement of the rolls.

US '924 fail to teach spacing between the end parts of the rollers to be in the range of 0.1 to 1.5 mm and to increase the width of the nip while casting.

However, JP '260 discloses the negative crown spacing being 0.3 mm to accommodate thermal expansion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide spacing at 0.3 mm as taught by JP '260, in US '924 in order to accommodate thermal expansion while casting.

*JP '257 discloses the method of strip casting by setting an initial gap between the rolls at the nip which is less than the thickness of the strip to be cast, and then increase the gap between the rolls to accommodate the thickness of the initially cast strip for the purpose of permitting an easy startup.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have initial gap smaller than the desired cast thickness as taught by JP '257, in US '924 in order to permit easy startup.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 5-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 903 190, and further in view of JP 59215257.

EP '190 discloses the apparatus for strip casting comprising a pair of rollers, wherein one roller is held against lateral bodily movement, the other is mounted on a pair of moveable roll carriers which allow one roll to move bodily laterally of the other roll and one roll is continuously biased laterally toward the other roll by application of biasing forces to the moveable roll carriers. A stop means is a stop which is set so as to be engaged by one or both of the moveable roll carriers (col. 6- col. 7).

EP '190 discloses the claimed invention above, but fails to teach setting an initial gap between the rolls at the nip which is less than the thickness of the strip to be cast, and then increase the gap between the rolls to accommodate the thickness of the initially cast strip.

*JP '257 discloses the method of strip casting by setting an initial gap between the rolls at the nip which is less than the thickness of the strip to be cast, and then increase the gap between the rolls to accommodate the thickness of the initially cast strip for the purpose of permitting an easy startup.*

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have initial gap smaller than the desired cast thickness as taught by JP '257, in EP '190 in order to permit easy startup.

6. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 903 190, in view of JP 59215257, and in view of JP 55-165260.

EP '190 and JP '257 disclose the claimed invention above in paragraph 5, but fail to teach spacing between the end parts of the rollers to be in the range of 0.1 to 1.5 mm.

However, JP '260 discloses the negative crown spacing being 0.3 mm to accommodate thermal expansion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to provide spacing at 0.3 mm as taught by JP '260, in US '924 in order to accommodate thermal expansion while casting.

#### *Response to Arguments*

7. Applicant's arguments filed 8/18/03 have been fully considered but they are not persuasive.

Applicant argues that JP '257 fail to disclose setting initial gap between the casting rolls at the nip less than the thickness of the strip to be initially cast and then casting to a thickness greater than the gap set between the casting rolls causing one of the casting rolls to move away

from the other casting rolls. Examiner respectfully disagrees. Applicant acknowledges that JP '257 "teaches that where the gap between the rolls is set less than the desired thickness of the cast strip that the initial velocity of the counter-rotating casting rolls must be adjusted to correspond to the roll gap, so that the cast strip of the thickness of the gap set is initially produced. Once the cast strip is initially produced that the roll speed is gradually adjusted in coordination with change of the roll speed to produce strip of increased thickness." Applicant further argues that JP '257 teaches away from the present invention which provides for cast strip of the desired casting thickness without going through the gradual increase in thickness after strip has been initially cast. However, such argument is not persuasive, since Applicant's acknowledgement and JP '257 clearly teaches increasing the gap gradually. Therefore, JP '257 discloses the claimed invention as claimed.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Len Tran whose telephone number is (703)605-1175. The examiner can normally be reached on M-F, 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

Len Tran  
Examiner  
Art Unit 1725

LT  
October 16, 2003



LEN A. TRAN  
PRIMARY EXAMINER